

# GLYPHOSATE (THE HERBICIDE IN “ROUNDUP”)

## ISSUE SUMMARY:

Glyphosate, the herbicide used in the weed killer “Roundup,” is the leading agricultural pesticide sold in the U.S. Use of glyphosate has increased in the U.S. as more crops genetically engineered to resist glyphosate have been integrated into agricultural production. In January 2020, EPA issued its Interim Decision for glyphosate, concluding that glyphosate presents no risks to human health, and reaffirming it is unlikely to cause cancer, when used in accordance with its current label. EPA’s scientific findings on human health risk are consistent with the conclusions of science reviews by many other countries and other federal agencies. To address ecological risks, EPA is requiring management measures to help farmers target pesticide sprays on the intended pest, protect pollinators, and reduce the problem of weeds becoming resistant to glyphosate.

## UPCOMING MILESTONES:

EPA expects to release a draft biological evaluation for glyphosate, evaluating the potential impacts of glyphosate on endangered species in November 2020.

## BACKGROUND:

The carcinogenic potential of glyphosate has been the subject of ongoing scientific debate within the academic community and among industry and environmental groups. The registration review of glyphosate required by FIFRA began in 2009. Delay in release of the draft risk assessments resulted from EPA’s decision to complete certain components of the analysis before release for public comment, e.g., first completing the endocrine screening analysis and then conducting a cancer re-evaluation following the determinations of IARC (March 2015 – probable carcinogen), the European Food Safety Authority (November 2015 – unlikely to pose a carcinogenic hazard to humans) and the Joint Food and Agriculture Organization/World Health Organization Meeting on Pesticide Residues (May 2016 - unlikely to pose a carcinogenic risk to humans from dietary exposure). EPA decided to conduct a peer review of the Agency’s proposed cancer classification of glyphosate given the conflicting findings of international bodies and the fact that it is the most heavily used agricultural pesticide (the peer review meeting was held on December 13-16, 2016).

The current re-evaluation of glyphosate’s cancer potential considers additional data not previously evaluated by the Office of Pesticide Programs’ Cancer Assessment Review Committee (CARC). In preparation for the FIFRA SAP meeting, EPA released all relevant documents and supporting materials on its evaluation of the cancer potential of glyphosate to the public. EPA’s classification of glyphosate is “not likely to be carcinogenic to humans at doses relevant for human health risk assessment.” This finding is in line with recent findings in Australia, Germany, Canada, New Zealand, the European Food Safety Authority, and the Joint Food and Agriculture Organization/World Health Organization Meeting on Pesticide Residues. In November 2017, the National Cancer Institute, which is part of the National Institutes of Health (NIH), found no association between glyphosate and the incidence of solid tumors or lymphoid malignancies, including non-Hodgkin lymphoma and its subtypes. In April 2019, EPA released its Proposed Interim Decision for glyphosate. EPA is aware that there is ongoing private litigation related to glyphosate.

## KEY EXTERNAL STAKEHOLDERS:

☒ Congress    ☒ Industry    ☐ States    ☐ Tribes    ☒ Media    ☒ Other Federal Agency  
☒ NGO    ☐ Local Government    ☒ Other: Growers

**Key stakeholder concerns:**

IARC's classification causing international restrictions: Some countries, including Mexico and Vietnam, have proposed or put in place restrictions or bans on the sale and use of glyphosate despite EPA's cancer classification being consistent with all other international expert panels and regulatory authorities that glyphosate is not likely to be carcinogenic to humans.

Weed resistance management: Glyphosate is used so commonly that more than a dozen weed species have developed a resistance to it.

Glyphosate residues in honey: The Food and Drug Administration recently tested honey samples for residues of glyphosate and found positive detections.

Glyphosate residues in human breast milk: The grassroots nonprofit group, [Moms Across America](#), which raises awareness about genetically modified organisms, has indicated it has evidence that residues of glyphosate have been detected in human breast milk. EPA has examined the test results submitted by Moms Across America and identified several concerns with the testing methods.

Glyphosate residues in vaccines: Moms Across America recently indicated that it has laboratory evidence that residues of glyphosate have been detected in vaccines. EPA has briefly examined the test results that were submitted and determined that the test results do not have enough information to support the group's conclusions.

## MOVING FORWARD:

In November 2020, EPA expects to release a draft biological evaluation for glyphosate, evaluating the potential impacts of glyphosate on endangered species.

LEAD OFFICE/REGION: OCSP

OTHER KEY OFFICES/REGIONS: ORD, OCHP